

AMENDED IN SENATE MAY 20, 2008
AMENDED IN SENATE MAY 6, 2008
AMENDED IN SENATE APRIL 22, 2008
AMENDED IN SENATE APRIL 8, 2008
AMENDED IN SENATE MARCH 27, 2008

SENATE BILL

No. 1269

**Introduced by Senator Wyland
(Coauthor: Senator Alquist)**

February 19, 2008

An act to amend Section 51210.3 of the Education Code, relating to science education.

LEGISLATIVE COUNSEL'S DIGEST

SB 1269, as amended, Wyland. Science education: *experimental science curriculum*.

Existing law authorizes the governing board of a school district to designate a credentialed teacher as a science coach at each elementary school, or provide staff development to teachers, for purposes of developing, coordinating, and providing instruction in an experimental science curriculum and coaching other teachers in the provision of that curriculum. Existing law requires that the experimental science curriculum be aligned to the California standards for investigation and experimentation and be designed to develop various types of knowledge and skills related to scientific experimentation.

This bill would add the understanding of engineering principals and engineering skills to that list of knowledge and skills.

~~The California Constitution requires the Legislature to encourage by all suitable means the promotion of intellectual, scientific, moral, and agricultural improvement. Under existing law, the Legislature finds and declares that improved science education in elementary and secondary schools contributes to improvements in pupil performance. Existing law provides for the establishment by the University of California, upon approval by the regents, of the California Science Project for purposes of providing science education to public elementary, secondary, and postsecondary school personnel located in rural, urban, and suburban areas throughout the state.~~

~~This bill would state findings and declarations of the Legislature regarding the need for science education programs, and would encourage the Superintendent of Public Instruction and the State Board of Education to consider ways to increase the number of pupils who go to college and graduate with degrees in the various scientific and engineering fields.~~

Vote: majority. Appropriation: no. Fiscal committee: no.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 *SECTION 1. Section 51210.3 of the Education Code is amended*
- 2 *to read:*
- 3 51210.3. (a) The governing board of a school district may
- 4 designate a credentialed teacher at each elementary school as a
- 5 science coach, or provide staff development to teachers, in order
- 6 to accomplish the objectives described in subdivision (b), as
- 7 determined by the governing board.
- 8 (b) The designated teacher shall do all of the following:
- 9 (1) Develop, coordinate, and provide instruction in a science
- 10 curriculum that incorporates experimentation. The curriculum shall
- 11 be aligned to the California standards for investigation and
- 12 experimentation, and be designed to develop all of the following:
- 13 (A) Understanding of basic scientific facts and principles.
- 14 (B) Mathematics skills.
- 15 (C) Reading comprehension.
- 16 (D) *Understanding of engineering principals and engineering*
- 17 *skills.*
- 18 ~~(D)~~

1 (E) Analytical and intellectual skills required to pose and answer
2 questions.

3 (2) Act as a coach for other teachers at the school in the
4 provision of a science curriculum based on experimentation.

5 (c) This section does not preclude the assignment of duties to
6 a science coach that are not listed in subdivision (b) and relate to
7 developing, coordinating, and providing instruction in a science
8 curriculum that incorporates experimentation.

9 ~~SECTION 1. (a) The Legislature finds and declares both of~~
10 ~~the following:~~

11 ~~(1) Science and technical innovation is critical for the future of~~
12 ~~California.~~

13 ~~(2) California is not producing enough scientists and engineers~~
14 ~~to meet the challenges our state's companies will face in the global~~
15 ~~competition of the future.~~

16 ~~(b) The Legislature therefore encourages the Superintendent of~~
17 ~~Public Instruction and the State Board of Education to consider~~
18 ~~ways to increase the number of pupils who go to college and~~
19 ~~graduate with degrees in the various scientific and engineering~~
20 ~~fields, including any of the following:~~

21 ~~(1) Recruiting more science teachers through incentives and~~
22 ~~public-private partnerships designed to encourage pupils to go to~~
23 ~~college, major in science and related fields, and enter teaching~~
24 ~~careers.~~

25 ~~(2) Revising the science teaching frameworks, and standards if~~
26 ~~necessary, to reflect the model curriculum developed by~~
27 ~~organizations of outstanding scientists, such as the National~~
28 ~~Academy of Science.~~

29 ~~(3) Incorporating in the science curriculum applied mathematics,~~
30 ~~reading comprehension, and expository writing in describing~~
31 ~~observations and experiments.~~

32 ~~(4) Incorporating in the science curriculum analytical,~~
33 ~~intellectual, and creative skills required to pose and investigate~~
34 ~~scientific questions.~~

35 ~~(5) Incorporating engineering elements in the science curriculum~~
36 ~~in a manner designed to engage pupils.~~

- 1 ~~(6) Encouraging companies in the private sector to participate~~
- 2 ~~in educating pupils and in offering them exposure to possible~~
- 3 ~~careers in the science and engineering fields.~~

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